# Bone Mineral Density of the Proximal Tibia in Wild Type and Btk Knockout Mice

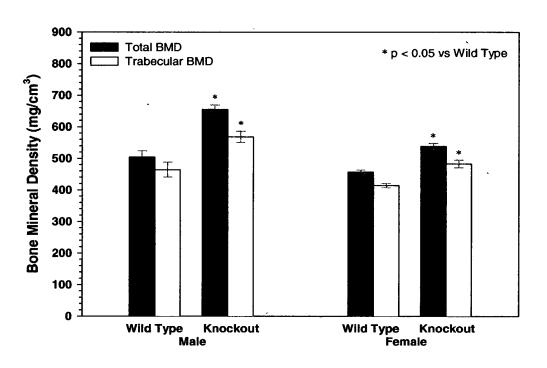


FIG. 1

# Bone Mineral Density of the Proximal Tibia in Wild Type and Btk<sup>xld</sup> Mice

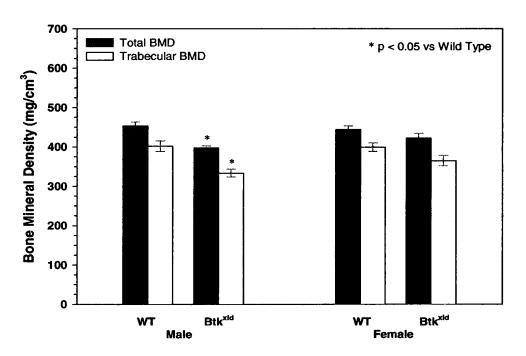
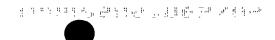


FIG. 2

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# Female Mice with Btklo Transgene

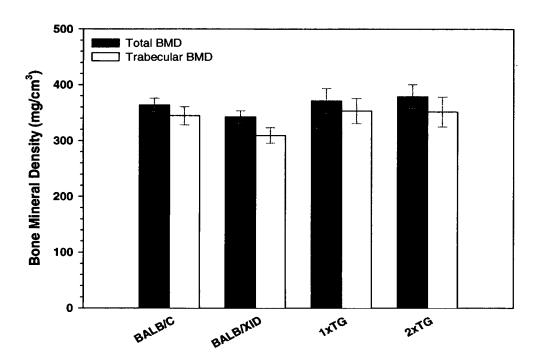


FIG. 3



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#### **BTK Constructs**

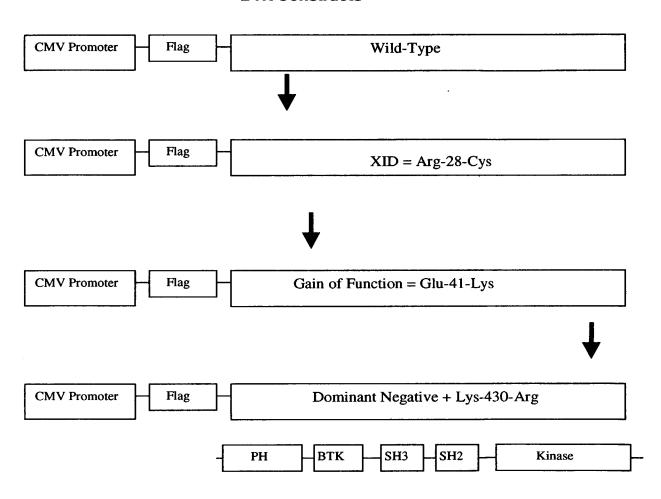


FIG. 4



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## Mu BTK wt tagged/untagged HEK/COS transient Western

HEK 293 COS7

HEK 293

COS7

9 8 7 6 5 4 3 2 1

FLAG M2 Ab

9 8 7 6 5 4 3 2 1

BTK M-138 Ab

Legend:

Lanes 1 and 5: pcDNA

Lanes 2 and 6: BTK wt/pcDNA

Lanes 3 and 7: p3XFLAG

Lanes 4 and 8: BTK wt/p3XFLAG

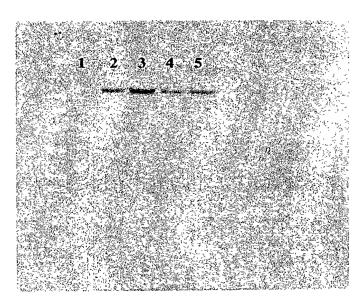
Lane 9: BAP FLAG control

FIG. 5



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## BTK-FLAG mutant RAW 264.7 stable mix whole cell lysates



α-FLAG Ab

#### Legend:

Lane 1: p3xFLAG vector control Lane 2: wt BTK in p3xFLAG Lane 3: R28C btk in p3XFLAG Lane 4: E41K btk in p3XFLAG Lane 5: K430R btk in p3XFLAG

FIG. 6



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### **Phosphorylation Analysis of BTK Mutants**

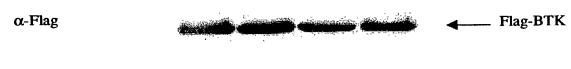


FIG. 7a

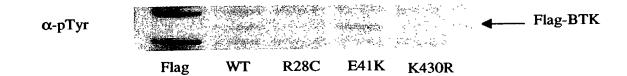


FIG. 7b

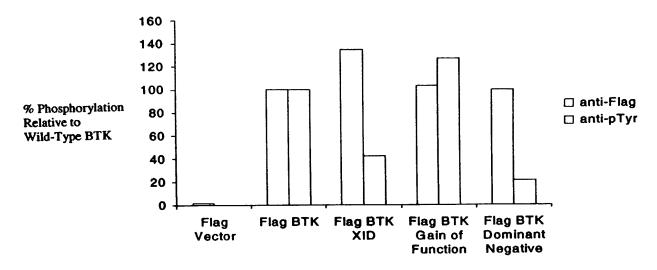


FIG. 7c



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### **Total Tyrosine Phosphorylation**

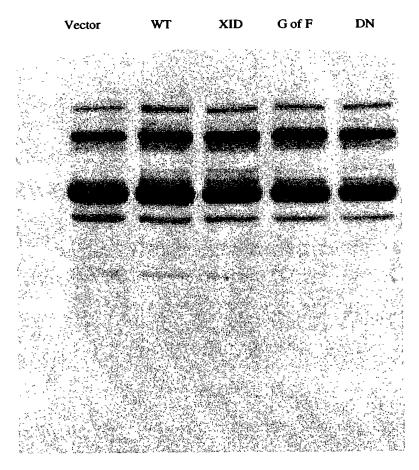


FIG. 8



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# BTK mutant immunoprecipitation kinase assays (stable pools, unstimulated)

rBTK SLP76 Mock IP Vector Wild Type mutant) E41K K430R

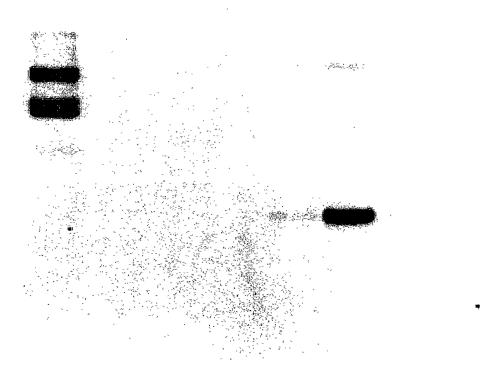


FIG. 9

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# Actin staining of Btk/RAW cell stable cell lines

Btk wt

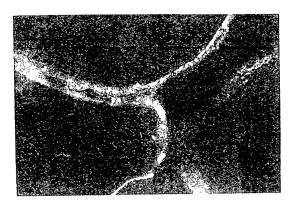
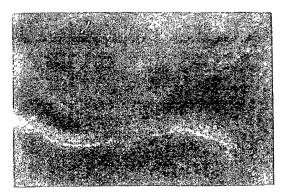


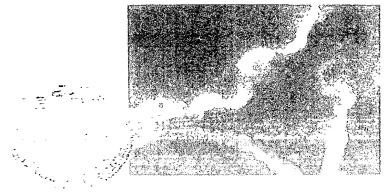
FIG. 10a

R28C-xid



**FIG. 10b** 

E41K-gain of function



**FIG. 10c**